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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,641	01/18/2002	Nikolaus Z. Schwabe	L7059-0001	8057

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EXAMINER	
CONLEY, SEAN E	

ART UNIT	PAPER NUMBER
1744	

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/051,641	SCHWABE, NIKOLAUS Z.	
	Examiner	Art Unit	
	Sean E Conley	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *September 5, 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *1/18/02* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. The amendment filed September 5, 2003 has been received and considered for examination. Claims 1-12 are pending and claims 1, 9 and 12 have been amended.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 12 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rohowetz (U.S. Pat. 4,188,437).

With respect to the rejection of claim 12 under 35 U.S.C. 102(b), the phrase "postage stamp" is not given any patentable weight (see M.P.E.P. 706.03(a)). Additionally, the limitation appearing after the "whereby" clause is also not given patentable weight since it merely expresses a result rather than a structural limitation of the stamp. See Texas Instrument Inc. v. International Trade Commission, 26 USPQ 2d 1018, 1023 (Fed. Cir. 1993) (A "whereby" clause that only expresses the necessary result of what is recited in the claims is not a positive claim limitation and can be ignored.).

Rohowetz discloses adhesive tapes that change color in the presence of water or

steam at an elevated temperature and are useful as sterilization indicators. The tapes comprise an adhesive layer and a polymeric base film containing on one surface thereof a coating of a thermotropic ink comprising a binder resin, a colorant which undergoes a color change in the presence of water or steam at elevated temperature, and a solvent blend. The adhesive is present on the back surface of the tapes and is used for affixing the indicator tapes to various surfaces. The colorant is located on the outer surface and is selected to produce a visible color change upon exposure to water or steam at elevated temperature (see column 2, lines 5-41). Also, claim 12, lines 5-6, recite the phrase "to the mail article". This phrase is considered to be the intended use of the adhesive and is not given patentable weight.

With respect to the rejection of 12 under 35 U.S.C. 103(a), Rohowetz teaches that while the tapes are designed primarily as sterilization indicators, they may provide other functions as well. For example, the tape may be printed to incorporate a message such as advertising material (see column 7, lines 40-42). If the phrase "postage stamp" were given patentable weight, it is known to use printed matter in combination with a sterilization color indicator on an adhesive strip. Therefore, it would have been obvious to one having ordinary level of skill in the art at the time the invention was made to combine a sterilization color indicator with a postage stamp because Rohowetz teaches that it is known to combine a sterilization color indicator with printed matter on a substrate comprising an adhesive backing.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koenck et al. (Patent Application Publication US 2002/0162971 A1) in view of Hori et al. (U.S. Pat. 3,899,677).

Koenck et al. disclose a system and method for irradiating and sterilizing mail articles that may be contaminated (see paragraphs [0058] to [0083]). The method comprises first collecting mail from "blue boxes" and individual residential mailboxes, then transporting the postal material to the post office, and finally sterilizing the mail at the post office prior to delivery of the mail to the recipients. Although the reference does not specifically disclose the step of affixing a postage stamp to the mail article it is implied that mail which has been collected by postal workers will have the proper

postage stamp since postage is required in order for the mail to be delivered by the post office.

The system disclosed by Koenck et al. comprises a sterilization apparatus which has a means to sterilize a mail article using e-beam sterilization. Also, it is disclosed that other sterilizing means are available such as x-rays or gamma radiation. However, the method and system of Koenck et al. does not teach a sterilization indicator affixed to the mail articles for indicating that the sterilization process is complete.

Hori et al. discloses a plastic film that changes color in response to a radiation dose. The plastic film has been developed for measuring and controlling the irradiation exposure during the sterilization of articles such as medical instruments and foodstuffs. Specifically, the coloring agents in the plastic film change color when irradiated during the sterilization process (see column 1, lines 15-35). The coloring agents are mixed with a plasticizer and a polymer and then coated onto a carrier such as a plastic film, a paper coated with plastic, or a metallic foil such as aluminum foil, and thereafter dried by heating (see column 3, lines 38-43 and lines 50-60). Additionally, the carrier may be provided with an adhesive layer such as a pressure sensitive adhesive (see column 4, lines 10-15)

Therefore, it would have been obvious to one of ordinary level of skill in the art at the time the invention was made to modify the invention of Koenck et al. and include an adhesive chemical indicator strip taught by Hori et al. affixed to the mail articles, since Hori et al. teaches that it is known to adhere a color changing chemical indicator strip to

an article being sterilized in order to determine when the article has received a predetermined amount of radiation in a sterilization process.

Additionally, the phrase "postage stamp" as well as the limitations of claims 6 and 7 regarding the markings on a postage stamp which indicate a payment of postal fees are not given any patentable weight because the claim language refers to the pictures or markings on a material and these features are not held to be patentable (see M.P.E.P. 706.03(a)). Therefore, the claims have been interpreted to include any adhesive color changing indicator strip capable of indicating when an article has been properly sterilized. Also, the limitation appearing after the "whereby" clause in claim 1 is not given patentable weight since it merely expresses a result rather than a structural limitation of the stamp. See Texas Instrument Inc. v. International Trade Commission, 26 USPQ 2d 1018, 1023 (Fed. Cir. 1993) (A "whereby" clause that only expresses the necessary result of what is recited in the claims is not a positive claim limitation and can be ignored.).

Regarding claim 8, the applicant has disclosed in the specification on page 13, line 1, that it is quite common for mail sent from larger companies or offices to utilize a postal machine which affixes an ink mark or a metering mark to the mail article. Therefore, it would have been obvious in view if the applicant's disclosure to affix a metering mark to a mail article since it is commonly known.

7. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koenck et al. (Patent Application Publication US 2002/0162971 A1) in view of Lewis et al. (U.S. Pat. 5,084,623).

Koenck et al. disclose a system and method for irradiating and sterilizing mail articles that may be contaminated (see paragraphs [0058] to [0083]). The method comprises first collecting mail from "blue boxes" and individual residential mailboxes, then transporting the postal material to the post office, and finally sterilizing the mail at the post office prior to delivery of the mail to the recipients. Although the reference does not specifically disclose the step of affixing a postage stamp to the mail article it is implied that mail which has been collected by postal workers will have the proper postage stamp since postage is required in order for the mail to be delivered by the post office.

The system disclosed by Koenck et al. comprises a sterilization apparatus which includes a means to sterilize a mail article using e-beam sterilization. Also, it is disclosed that other sterilizing means are available such as x-rays or gamma radiation. However, the method and system of Koenck et al. does not teach a sterilization indicator affixed to the mail articles for indicating that the sterilization process is complete.

Lewis et al. disclose a multi-ply radiation dosage indicator that changes color upon being irradiated. This serves to provide a visual indication as to whether the substrate to which the indicator is attached has been exposed to a radiation dosage exceeding a predetermined threshold (see column 2, lines 55-64). The indicator (10) is

formed as a multi-ply laminate including a first ply (12) having visible indicia (14) thereon. The indicia, as shown, represents letters forming the word "NOT". A second ply (16) of transparent material is provided which defines a radiation sensitive surface (18) disposed in overlying relation to the indicia (14) of the first ply (12). The radiation sensitive zone (18) is capable of changing opacity in response to exposure to radiation exceeding a predetermined threshold so as to change visibility of indicia (14). Suitable for use as a second ply (16) are films of a radiation sensitive polyacetylenic system that provides a color change. A third ply (20) may be provided in overlying relation to plies (12) and (16). The third ply (20) is formed having a viewing zone in the form of a cut-out (22) positioned to permit exposure of indicia (14). Ply (20) also has visible readable indicia (24) thereon positioned adjacent viewing zone (22). The indicia (24) represents letters forming the word "IRRADIATED". Together the indicia (14) and (24) together provide a visual readable indication as to whether the indicator has been exposed to a radiation dosage exceeding the predetermined threshold (see col. 4, line 43-col. 5, line 14). In order to permit the indicator (10) to be attached to a substrate or other object being subjected to radiation, a pressure sensitive adhesive ply (30) is applied to the bottom of first ply (12) (see column 6, lines 42-48 and figures 1-4).

Lewis et al. further disclose an example of irradiating a blood bag. The indicator strip is attached to the blood bag prior to irradiation and the strip reads "NOT IRRADIATED". The bag is then irradiated until the radiation dosage reaches a predetermined threshold and the indicator strip changes color so as to read "IRRADIATED" (see column 5, lines 15-33).

Therefore, it would have been obvious to one of ordinary level of skill in the art at the time the invention was made to modify the invention of Koenck et al. and include an adhesive chemical indicator strip taught by Lewis et al. affixed to the mail articles, since Lewis et al. teaches that it is known to adhere a color changing chemical indicator strip to an article being sterilized in order to determine when the article has received a predetermined amount of radiation in a sterilization process.

Additionally, the phrase "postage stamp" as well as the limitations of claims 6 and 7 regarding the markings on a postage stamp which indicate a payment of postal fees are not given any patentable weight because the claim language refers to the pictures or markings on a material and these features are not held to be patentable (see M.P.E.P. 706.03(a)). Therefore, the claims have been interpreted to include any adhesive color changing indicator strip capable of indicating when an article has been properly sterilized. Also, the limitation appearing after the "whereby" clause in claim 1 is not given patentable weight since it merely expresses a result rather than a structural limitation of the stamp. See Texas Instrument Inc. v. International Trade Commission, 26 USPQ 2d 1018, 1023 (Fed. Cir. 1993) (A "whereby" clause that only expresses the necessary result of what is recited in the claims is not a positive claim limitation and can be ignored.).

Regarding claim 8, the applicant has disclosed in the specification on page 13, line 1, that it is quite common for mail sent from larger companies or offices to utilize a postal machine which affixes an ink mark or a metering mark to the mail article.

Therefore, it would have been obvious in view if the applicant's disclosure to affix a metering mark to a mail article since it is commonly known.

Arguments

8. The applicant's arguments are listed below:

Regarding the rejection of claim 12 under 35 U.S.C. 102(b) or in the alternative 35 U.S.C. 103(a), the applicant argues:

a. A postage stamp is much more than printed matter. A postage stamp is a form of payment to the U.S. Postal Service for delivering a mail article. The stamp provides a specific denomination of payment and is, in reality, a type of currency.

b. Rohowetz only discloses an adhesive strip which changes color in the presence of water or steam, and not by a beam of energy. Water and steam would be not be an effective way of sterilizing mail articles.

c. It would not have been obvious to combine a sterilization indicator with a postage stamp.

Regarding the rejection of claims 1-11 under 35 U.S.C. 103(a), the applicant argues:

a. Melker does not teach or suggest a sterilization indicator which changes color based on an irradiation process, but rather teaches an indicator which changes color based upon temperature change.

b. A postage stamp is far more than merely printed matter, but rather is currency utilized by the U.S. Postal Service. Neither reference teaches utilizing an indicator which performs two specific functions, namely providing a sterilization indication as well as indicating that payment has been paid for the postage.

c. Melker does not suggest utilizing color changing adhesive strips as postage stamps and there is no motivation to combine Koenck and Melker.

Response to Arguments

9. Applicant's arguments filed September 5, 2003 regarding claim 12 have been fully considered but they are not persuasive. As stated in the previous and current office action the phrase "postage stamp" is not given patentable weight. According to M.P.E.P. 706.03(a) printed subject matter is not held to be patentable. Also, the specific function of the printed matter is not considered as well.

Regarding the limitation "utilizing a beam of energy for sterilization", this is also not given patenable weight. The limitation appearing after the "whereby" clause in claim 12 is not given patentable weight since it merely expresses a result rather than a structural limitation of the stamp or sheet of material. See Texas Instrument Inc. v. International Trade Commission, 26 USPQ 2d 1018, 1023 (Fed. Cir. 1993) (A "whereby" clause that only expresses the necessary result of what is recited in the claims is not a positive claim limitation and can be ignored.). Therefore, the reference to Rohowetz anticipates claim 12. Additionally, water and steam may not be the most effective way

of sterilizing mail as recited by the applicant, however, water and steam are both capable of sterilizing mail articles.

10. Applicant's arguments with respect to claim 1-11 have been considered but are moot in view of the new ground(s) of rejection. The applicant has amended claims 1 and 9 to include the limitations "radiating an energy beam" and "utilizing a radiation beam of energy", respectively. In response to the currently amended claims a new grounds of rejection has been presented above. Specifically, the newly cited prior art to Hori et al. and Lewis et al. both disclose indicator strips that change color in response to an irradiation process to indicate when an article has received a predetermined dosage of radiation necessary to sterilize the articles. Additionally, both references disclose indicator strips that have adhesive layers for applying the strips to the articles being treated with a beam of irradiation.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Conley, whose telephone number is (703) 305-2430. Beginning December 16, 2003, the examiners phone number will change to (571) 272-1273. The examiner can normally be reached on Monday-Friday 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Robert Warden, can be reached at (703) 308-2920. The Unofficial fax phone number for this group is (703) 305-7719. The Official fax phone number for this Group is (703) 872-9310. The direct fax number to the examiner is (703)-746-8859. Beginning December 16, 2003, the direct fax to the examiner will change to (571)273-1273.

When filing a FAX in Technology Center 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of the application. This will expedite the processing of your papers.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [robert.warden@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist, whose telephone number is (703) 308-0661.

SEC

November 14, 2003

Robert J. Warden, Sr.

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